

5

CZECHOSLOVAKIA

TRNOVEC, T; BENO, M; ZBORIL, V; RUSEK, V; PLESKOVA, A;
KLUVANEK, P.

Institute of Industrial Hygiene and Occupational Disease
(Ustav hygieny prace a chorob z povolania), Bratislava
(for all)

Bratislava, Bratislavske lekarske listy, No 9, 1963, pp 529-
533

"The Effect of Intensification by Vitamin A of Resorption
Processes in the Bone Tissue on Radioactive Cerium
Fixation."

CZECHOSLOVAKIA

BOUZOVA, Z; RUSEK, V.

Bratislava, Farmaceuticky obzor, No 6, 1963, pp 279-281

"On the Reason for the Importance of the Word Apotheca."

TRNOVEC, T.; BENO, M.; PLESKOVA, A.; RUSEK, V.; TATARA, M.

Effect of diethylenetriaminepentaacetic acid (DTPA) on radioeuropium administered intravenously to rats. Bratisl. lek. listy 44 no.4:201-204 31 Ag '64.

1. Ústav hygieny práce a chorob z povolania v Bratislave, (riadiťel prof. MUDr. M. Nosal).

CZECHOSLOVAKIA

HANZLICEK, Z; RUSEK, V.

Bratislava, Farmaceuticky obzor, No 5, 1963, pp 227-230

"News of the Activity of Groups Concerned with the History
of Pharmacy."

TRNOVEC, Tomas; BENO, Milan; PLESKOVA, Anna; HANTABAL, Eugen; RUSEK, Vlastimil

Metabolism of radiocerium administered intratracheally in white
rats. Prac. lek. 16 no.5:197-202 JI '64.

1. Ustav hygieny prace a chorob z povolania v Bratislave (riaditel
prof. dr. M. Nosal).

RUSESCU, A., prof.; POPESCU, V., dr.; CONSTANTINESCU, Margareta

Neuromeningeal manifestations in acute leukemia in children.
Considerations on 2 cases. *Pediatria (Bucur.)* 13 no.6:501-508
N-d '64

1. Lucrare efectuata in Clinica I de pediatrie "Emilia Irsa",
Bucuresti.

RUSEV, Kh.

Bulgaria/Diseases of Farm Animals. Diseases Caused by -
 and Rickettsiae

Journal of Agr-Biol.. 1966, 27:25

Author : Zhelevskiyev Bazar, Rusev Christo, Sonchev
 Holia, Christova Maria, Satyeva Vera

Inst : Not given

Title : Contemporary position concerning the problem of
 specific immune only roentgenitis of some animals

Orig sub : Belokosten. Vis't. 1966. 1, No 5, 175-85

Abstract : It has been proposed that crystal-violet vac-
 cine should be administered in decreased dos-
 es (instead of five and ten milligrams, one
 and two milligrams respectively) with the help
 of a stimulator. This new composition of the
 latter enter culture and an alum large and sub-
 stance, which increases the period of resorption

and 1/2

RUSEV, Khristo Nachev, inzh.

Underground drinking water in the Danube River Terrace. Kridrotekh
i melior 9 no.9:266-268 '64.

RUSHCHAK, M.
ANTAL, Yu.; RUSHCHAK, M. [Rusčak, M.]

Conditioned reflex changes in the lactic acid level of blood in dogs [with summary in English]. Fiziol.zhur. 43 no.10:941-948 O '57.
(MIRA 11:1)

1. Kafedra fiziologii Meditsinskogo fakul'teta Universiteta im. Komenskogo i Laboratoriya neyrofiziologii Slovatskoy akademii nauk, Bratislava.

(LACTIC ACID, in blood
conditioned reflex changes in dog (Rus))
(REFLEX, CONDITIONED,
blood lactic acid changes in dog (Rus))

RUSCHEV, D.

BULGARIA/Chemical Technology. Chemical Products and Their I-8
Application. Ceramics. Glass. Binders. Concrete.

Abs Jour : Ref Zhur-Khimiya, No 2, 1958, 5307.

Author : Dimitrov D., Ruschev D., Belichev P., Donchev M.

Inst : Chemico-Technological Institute.

Title : Adsorptive and Decolorizing Properties of
Some Natural Bulgarian Silicates.

Orig Pub : Godishnik Khim.-tehnol. in-t, 1955, (1956), 2,
No 1, 113-125.

Abstract : A study of 14 Bulgarian natural silicates (clays,
kaolins, trass and kieselguhr) after thermal act-
ivation in the temperature range from 110 - 400°
and after acid activation with HCl or H₂SO₄ at
a concentration from 1 to 20%. Adsorptive ca-
pacity was checked by the benzene method and
decolorizing power -- by decolorization factor.

Card : 1/2

BULGARIA/Chemical Technology. Chemical Products and Their I-8
Application. Ceramics. Glass. Binders.
Concrete.

Abs Jour : Ref Zhur-Khimiya, No 2, 1958, 5307.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446120002-1"

Abstract : Optimal temperature of thermal activation
differs for individual natural silicates and
varies from 150 to 400°, while optimal con-
centration of the acid, on acid activation,
varies from 1 to 10%.

Card : 2/2

RUSCHEV, D.

BULGARIA/Chemical Technology - Chemical Products and Their I-8
Application. Treatment of Natural Gases and Petroleum.
Motor and Jet Fuels. Lubricants.

Ref Zhur-Khimiya, No 1, 1958, 2590

RUSCHEV, D.

BULGARIA / Chemical Technology, Chemical Products and Their
Application. Part 3. - Treatment of Natural Gases
and Mineral Oil, Motor and Rocket Fuel, Lubricants.

H-22

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12555.

Author : D. Rushev.

Inst : Not given

Title : Winning of Liquid Fuel from Bituminous Shales.

Orig Pub : Priroda (Bulg.), 1956, 5, No 6, 9 - 15.

Abstract : A review article concerning the reserves, characteristics
and treatment methods (winning of liquid fuel) of bituminous
shales and in particular of shales from Bulgarian deposits,
the reserves of which are estimated to be 80 millions of
tons. Considering that at the semicoking experiments with

Card 1/2

BULGARIA / Chemical Technology, Chemical Products and Their
Application. Part 3. - Treatment of Natural Gases
and Mineral Oil, Motor and Rocket Fuel, Lubricants.

H-22

"APPROVED FOR RELEASE: 08/25/2000" CIA-RDP86-00513R001446120002-1

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12553.

Abstract : from the tar from semicoking the "Black Sea" mine coal.
The structure of the sulphur compounds was established based
on the melting point of their compounds with $HgCl_2$ and on
the results of the Laubenheimer's reaction and the indo-
phenone test, as well as on n^{20}_D .

Card 2/2

USSR/Chemical Technology. Chemical Products and Their Application -- Treatment of natural gases and petroleum. Motor fuels. Lubricants, I-13

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5534

Author: Rushev, D. D.

Institution: None

Title: Use of the Microscope in the Investigation of the Degree of Regeneration of Avtols [Automobile Lubricating Oils]

Original

Publication: Neft. kh-vo, 1956, No 6, 57-58

Abstract: It is recommended to check the degree of purification of avtols, during their regeneration, by means of the microscope, since this reveals mechanical admixtures, 3-15 μ in size, which cannot be quantitatively determined by the conventional methods of filtration and extraction.

Card 1/1

RUSCHEV, D.

"On the baking of coal." In English. p. 57

Doklady. Sofia, Bulgaria, Vol. 12, No. 1, January/February, 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 9, No. 2,
February, 1960. Uncl.

RUSCHEV, D.

Catalytic oxidation of paraffin up to butyric acid in the presence of a manganic catalyzer. p. 9.
(Leka Promishlenost, Vol. 5, no. 12, 1956, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

RUSCHEV, D.

Production of electrode coke by coking generator tar from the coal of Nikolaevo. p. 28.
(Tekhnika, Vol. 5, no. 6, Nov./Dec. 1956, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June, 1957, Uncl.

RUSCHEV, D.

Possibilities of utilizing so-called acid petroleum asphalt. p. 33.
(Tezhka Promishlenost, Vol. 5, no. 12, 1956, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

RUSCHEV, D.

"Repairing cracked motor blocks and heads of automobiles and tractors",
P. 53., (TESHKA PROMISHLENCST, Vol. 3, No. 10, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,
No. 6, June 1955, Uncl.

RUSCHEV, D.D.

Using the microscope in studying the degree of reconditioning of
motor oils. Neft.khoz.34 no.6:57-58 Je '56. (MLRA 9:9)

1.Narodnaya Respublika Bolgariya.
(Oil reclamation)

RUSCHEV, D.D

RUSCHEV, D. New synthetic film-forming material for producing frost designs
from higher acetylene polymers. p. 419. Vol. 3 1955
IZVESTIYA. Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

~~RUSHEV, D.D.~~ RUSCHEV, D.D.

1195. USE OF THE MICROSCOPE FOR DETERMINING THE EXTENT OF REGENERATION
Ruschev, D.D.

glm LTH

0002

GERASIMOV, M.; RUSCHEV, D.; RAYKOV, Kr.; BRANYAKOV, L.

Use of bitumen emulsions in road construction in Bulgaria.

Avt.dor. 27 no.1:23-24 Ja '64.

(MIRA 17:4)

RUSCHEV, D.; DIMITROV, D.

Precious minerals. Prir i znanie 12 no.7:18-20 S '59. (EEAI 9:10)
(Precious stones)

1639. OIL INDUSTRY OF THE PEOPLE'S REPUBLIC OF BULGARIA.
Ruschev, D.D. (Nef. Khoz. (Oil ind., Moscow), Mar. 1957, 64, 65).
Properties of the petroleum are given in detail. It is a heavy, tarry,
aromatic-naphthenic oil containing only 0.32% sulphur and no gasoline
fraction. It has the unusually low freezing point of -24°C. The gas is
dry, with a methane content of over 95%. 150,000 tons of oil were produced
in 1955, and 230,000 tons in 1956, of which half was exported. 50,000 to
60,000 tons are refined in Bulgaria; 120,000 tons will be refined in 1960.
The products are diesel fuels, industrial oils, residual oils, road
bitumens, etc. (L).

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Alcoholysis of esters by (mixed) alcoholates and mixed organomagnesium phenolates. D. Ivanov and T. Rushev. *Ann. univ. Sofia II, Facult. phys.-math.* 29, 331-8 (in French 339-40) (1933).—In the 1st series of reactions between alc. esters of monocarboxylic acids and alcoholates it was found that the heavy radicals R' of alcoholates

1 were displaced by light radicals R_1 of esters. In the reactions between phenolic esters of monocarboxylic acids and alcohols the aryl radicals R were displaced by alkyls R' . A reverse reaction does not take place. The phenolates were often less sol. in Et_2O than alkocolates. In the 3rd series of reactions between esters of dicarboxylic acids and alcohols the mixed esters were obtained in 20-8% yield only by displacing the alkyls by other heavier alkyls because 1 part of the mol. r substance is transformed to a sym. ester, corresponding to Mg alcoholate. The mode of operation for the 1st series of expts. is as follows: Prep. 0.15 g.-mol. of Grignard reagent with about 130 cc. Et_2O and oxidize completely at 0° in a closed vessel. Add 0.15 g.-mol. of ester in 50 cc. Et_2O and heat under a reflux for 5 hrs. Hydrolyze the reaction mixt. cautiously at 0° to prevent sapon. Ext. 3 times with Et_2O , wash the ether soln. with 5-10 cc. H_2O , dry over CaCl_2 and distill the ether, using a Vigreux column. Finally distil fractionally. The fraction contg. the ester sought contains also the corresponding alc.; the detn. is performed in EtOH by sapon. The phenolates were prepd. by the reaction of phenols with EtMgBr . These substances were heated for 10 hrs. under a reflux and after hydrolysis the phenol not undergoing reaction was extd. with a freezing mixt. of NaOH . J. Kučera

J. Kučera

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCEDURES AND PROPERTIES INDEX										PROCEDURES AND PROPERTIES INDEX									
BC B-U-7 Oil of Sphagnum, Sphagnum, L., as source of olein. S. V. B. and N. F. DUBJAN- SKAYA (J. Appl. Chem. Russ. 1939, 12, 1499- 1504).—The olein yield up to 50% of oil containing 80% of oleic acid ester. Toxic substances present in the oil can be entirely eliminated by extraction with EtOH. The oil thus purified may be used in- stead of oleic acid for the oiling of wool. R. T.																			
ASTM-SLA DETALLURGICAL LITERATURE CLASSIFICATION										ASTM-SLA DETALLURGICAL LITERATURE CLASSIFICATION									
1ST AND 2ND COLUMNS										1ST AND 2ND COLUMNS									
3RD AND 4TH COLUMNS										3RD AND 4TH COLUMNS									

BC

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PROCESSING AND POSTPROCESSING

B-2-7

Antioxidants in animal oil. S. V. Kuchkovskii (Biotekhnika, 1940, 8, 803-812).—The oil obtained by pressing whole flaxseed has almost the same composition as that obtained by grinding the residue after pressing and pressing again, but is more deeply coloured and dries more slowly. The difference in rate of drying is due to the difference in content of non-oily constituents, including phosphatides and carotenoids which have antioxidative action. W. McC.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION 1										SECTION 2										SECTION 3										SECTION 4									
SUBSECTION 1										SUBSECTION 2										SUBSECTION 3										SUBSECTION 4									

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCESSES AND PROPERTIES INDEX																			
Synthesis of valuable aromatic aldehydes from new sources. A. I. KUCHENKOVSKIY. (Compt. rend. Acad. Sci. U.R.S.S., 1953, 118-123).—The CHO group can be introduced into carbohydrates, phenols, and their ethers by condensation with phos- oxalic esters. The possibility of the commercial synthesis of vanillin, barbitol, and halotropin by reduction of substituted, o-phthalic anhydrides is envisaged. R. T.																			
ASR-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									

PROCESSES AND PROPERTIES INDEX

B-1-10

Design of concrete with portland Portland cement. G. M. FORST (Portland Cement, U.S.S.R., 1964, 161-200).—Forst's formula for the estimation of the strength of a concrete holds for plastic mixes of (A) portland cement concrete as well as for (B) Portland cement concrete. There are variations from the formula for dry or very wet mixes. The rate of strength development of A is < that of B at early ages, but increases later. Thus at 28 days the strength of A is 37-47% of B, whilst at 1 year the difference is only 16-18%. This increase at long ages should be taken into account in design, to avoid uneconomical use of cement. T. W. P.

ASR-SLA METALLURGICAL LITERATURE CLASSIFICATION

SUBJECT INDEX										AUTHOR INDEX									
1ST AND 2ND ORDER										1ST AND 2ND ORDER									
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z										A B C D E F G H I J K L M N O P Q R S T U V W X Y Z									

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
BC B-1-10 Effect of high temperature on various cements. G. M. Ryzhenko (Prestolite Cements, U.S.S.R., 1936, 1937). The investigation is described to determine whether the properties of prestolite cements during heating up to 800° and subsequent re- hydration compare favorably with Portland cements from the viewpoint of the destruction of structures containing them. Heating curves, contraction curves during heating, curves of the heat of hydration after heating to different temp., and compressive strength variation curves for varying heat and storage treat- ments were obtained. Prestolite cements showed an absence of free Ca(OH)₂ in the heating curves, the greatest contraction on heating of any of the cements, the lowest heat of rehydration after heating to 800°, and less reduction in compressive strength after heat- ing. T. W. P.																			
ASH-564 METALLURGICAL LITERATURE CLASSIFICATION																			
FROM SYNONYM										FROM SYNONYM									
SYNONYM										SYNONYM									

MIHUL, C.; RUSCIOR, C.; POP, V.; SUCIU, M.; RADULESCU, Gh.

Fluorescence of mineral oils. Studii fiz tehm Iasi 12 no.1:7-14 '61.

RUSCIOR, Constantin

A laboratory verification of the generalized theory of relativity.
Studii fiz tehm Iasi 12 no.1:135-140 '61.

MIHUL, Const., prof.; RUSCIOR, C.; POP, V.; SUCIU, M.; RADULESCU, G.

Fluorescence spectra of mineral oils. Studii fiz tehn Iasi 10 no.2:
151-157 '59. (EEAI 9:9)

1. Comitetul de redactie, Studii si cercetari stiintificem Fizica
si stiinte tehnice, Filiala Iasi, Academia Republicii Populare
Romine (for Mihul).
(Mineral oils) (Fluorescence) (Spectrum analysis)

RUSCHOR, C

MIKHUL, K.; RUSCHOR, K.; POP, V.; SHVARTS, F.R.; REDULESKU, G.A.

Fluorescence spectra of motor fuels. Izv. AN SSSR. Ser. fiz. 23
no. 1:122-125 Ja '59. (MIRA 12:4)

(Fluorescence)
(Motor fuels--Spectra)

ROMANIA/Optics - Luminescence

K-6

Abstr Jour : Ref Zhur - Fizika, No 4, 1959, No 6751

Author : Nihul C., Ruscior C., Pop V.
 Inst : University Al. I. Cuza, Rumania
 Title : Fluorescence Spectra of Kerosenes

Orig Pub : An. stiint. Univ. Iasi., 1956, Sec. 1, 2, No 1-2, 199-210

Abstract : Four grades of kerosenes were investigated. In three-minute photography on the E31 Hilger spectrograph there was observed fluorescence in the region of 3200-4600 Å. The glow in the region of the wave lengths longer than 3700 Å, due to the presence of polycyclic compounds (principally anthracene) is observed in kerosenes that were distilled to high temperatures. Kerosene distilled to 272° C practically does not glow in this region. When the kerosenes are diluted in ether, the fluorescence in the region of wavelengths greater than 3700 Å vanishes rapidly. But at the same time there appears and also vanishes a glow in the region $\lambda < 3200$ Å. At greater dilutions, one observes only the fluorescence in the region 3200-3700 Å.

Card : 1/2

PORA, Eugen A., prof.; OROS, Ion; RUSDEA, Delia; WITTENBERGER, Carol; STOICOVICI Florica

Incorporation and elimination of P^{32} in some organisms of the Black Sea. Studii biol Cluj 12 no.2:293-326 '61.

1. Academia R.P.R., Filiala Cluj, Centrul de cercetari biologice, Sectia de fiziologie animala comparata, Universitatea "Babes- Bolyai," Cluj, Catedra de fiziologia animalelor, si Statiunea biologica marina "Ion Borcea," Agigea, Constanta. 2. Membru corespondent al Academiei R.P.R. si membru al Comitetului de redactie, "Studi si cercetari de biologie" - Filiala Cluj - (for Pora).

PORA, Eugen A., prof.; ROSCA, Dumitru; RUSDEA, Delia

Studies on the role of the cerebral hemispheres in the distribution of P^{32} in the organs of the white rats, trained and nontrained, submitted to a muscular effort. Studii biol Cluj 12 no.2:281-292 '61.

1. Universitatea "Babes-Bolyai," Cluj, Catedra de fiziologia animalelor.
 2. Membru corespondent, al Academiei R.P.R. si membru al Comitetului de redactie, "Studii si cercetari de biologie" - Filiala Cluj - (for Pora).
- *

ROSCA, Dumitru I.; FORA, Eugen A., prof.; RUSDEA, Delia

Distribution of P³² in the segments of hen's genital tract depending on the time of laying. Studii biol Cluj 12 no.2:253-258 '61.

1. Universitatea "Babes-Bolyai," Cluj, Catedra de fiziologia animalelor si Academia R.P.R., Filiala Cluj, Centrul de cercetari biologice, Sectia de fiziologie animala comparata. 2. Membru corespondent al Academiei R.P.R. si membru al Comitetului de redactie, "Studii si cercetari de biologie" - Filiala Cluj - (for Fora).

*

PORA, Eugen A.; RUSDEA, Delia; ROSCA, Dumitru I.; STOICOVICI, Florica;
WITTENBERGER, Carol

Influence of osmotic and saline water modifications on the protein
components of the hemolymph of *Pachigrapsus marmoratus* of the Black
Sea. Studii biol Cluj 11 no.2:303-310 '60. (EEAI 10:9)

1. Academia R.P.R., Filiala Cluj, Centrul de cercetari biologice,
Sectia de fiziologie animala comparata. 2. Membru corespondent
al Academiei R.P.R. (for Pora).

(Black Sea—*Pachygrapsus marmoratus*) (Crabs)
(Hemolymph) (Osmosis) (Saline waters)
(Proteins)

PORA, Eugen A., prof.; ROSCA, Dumitru I.; RUSDEA, Delia

Effects of decerebration of the white rats upon the incorporation of P^{32} in the cold. Studii biol Cluj 12 no.2:275-280 '61.

1. Academia R.P.R., Filiala Cluj, Catedra de cercetari biologice, Sectia de fiziologie animala comparata. 2. Membru corespondent al Academiei R.P.R. si membru al Comitetului de redactie, "Studii si cercetari de biologie" - Filiala Cluj - (for Pora).

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PORA, Eugen A.; RUSDEA, Delia

Contributions to the study of protein modifications in the serum of
the white rat during effort and exhaustion. Studii-biol Cluj 11
no.2:311-317 '60. (EEAI 10:9)

1. Academia R.P.R., Filiala Cluj, Centrul de cercetari biologice,
Sectia de fiziologie animala comparata; 2. Membru corespondent of
Academie R.P.R. (for Pora).

(Rats) (Serum) (Proteins) (Fatigue)

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RUSEK, Benedykt

Fireproof apparatus for the automation of tape conveyers.
Wiadom gorn 11 no. 5:174-176 My '60.

RUSEK, Benedykt

The inductive sensing element as basis for a universal system
of conveyer automation. Wiadom gorn 11 no. 1/2:43-45 Ja-F
'60.

HANZLICEK, Zd.; RUSEK, V.

History of the Czechoslovakian Pharmaceutical Society. I.
Old period (1869-1919). Cesk. farm. 13 no.3:137-142 Mr.'64.

1. Farmaceuticke museum zavodniho klubu ROH lekarenske sluzby
UNZ NV hlavniho mesta Prahy a Ustav dejin lekarnictvi farma-
ceuticke fakulty, UK, Bratislava.

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TRNOVEC, T.; BENO, M.; ZBORIL, V.; RUSEK, V.; PLESKOVA, A.;
KLUVANEC, P.

Effect of intensification of the absorptive processes of bone
tissue by vitamin A on the uptake of radiocerium. Bratisl. lek.
listy 43 Pt. 1 no.9:529-535 '63.

1. Ustav hygieny prace a chorob z povolania v Bratislave,
riaditel MUDr. I. Klucik.

(CERIUM ISOTOPES) (VITAMIN A)
(BONE AND BONES) (METABOLISM)
(FEMUR) (RATS)

[CZECHOSLOVAKIA]

V. ROSEK, Department of the History of Pharmacy (Ustav dejin
lekarnictvi) Faculty of Pharmacy, Comenius University, Bratislava.

"Development of Injectible Preparations. Part 2. Development of
Technology of Injection Forms."

Prague, Ceskoslovenska Farmacie, Vol 12, No 1, Jan 1963; pp 50-59.

Abstract: Historical review of the development especially of the
single-dose vial, attributed primarily to the Russian Pel in 1885,
Frenchman Limouzin in 1886 and German Friedlaender in the same year.
Ten illustrations of ampules and facilities; 90 references, mostly
19th century publications. [English summary modified]

1/1

RUSESKU, Al-fred [Rusescu, A.], prof.; DZHEORMANYANU, Mirchya [Geormanianu, M.], kand.med.nauk

Significance of pneumonediastinography in primary tuberculosis
in children. Vest. rent. i rad. 35 no. 6:14-16 N-D '60.
(MIRA 14:2)

1. Iz 1-y pediatricheskoy kliniki, Bukharest.
(TUBERCULOSIS) (PNEUMOMEDIASTINUM)

RUMINE/Chemical Technology. Chemical Products and Their
Application. Caoutchouc, Natural and Synthetic.
Rubber.

II-31

Ibs Jour: Ref Zhur-Khim., No 2, 1959, 6678.

Author : Rusescu, C.

Last :

Title : From Natural to Synthetic Caoutchouc.

Orig Pub: Ind. ussian, 1958, 5, No 3, 97-105.

Abstract: A popular essay. - V. Shershnev.

Card : 1/1

SOV/124-58-2-2465

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 125 (USSR)

AUTHOR: Rushchuk, G. M.

TITLE: Development of Methods for the Determination of the Mechanical Properties of Cements and Their Standardization (To the 75th Anniversary of the Issuance of the First Russian Portland-cement Standards) [Razvitiye metodov opredeleniya mekhanicheskikh svoystv tsementov i ikh standartizatsii. (K 75-letiyu izdaniya pervykh russkikh norm na portland-tsement)]

PERIODICAL: V sb.: 15-ya nauchn. konferentsiya Leningr. inzh. -stroit. in-ta. Leningrad, 1957, pp 425-427

ABSTRACT: The theses of the papers delivered at the conference denote the beneficial effect on the development of the domestic cement production exerted by the regular meetings of Russian scientists and technicians and by the congresses of the Mezhdunarodnoye obshchestvo po ispytaniyu materialov (International Society for the Testing of Materials). Special homage is paid to the long-time president of the International Society, professor Nikolay Appolonovich Belelyubskiy, the well-known scientist-builder. Yu. Ya. Shtayerman

Card 1/1

RUSHCHUK, G.M., kand. tekhn. nauk

Exactness in calculating strength of concrete depending on the
activity of cement. Ser. 1 zhel.-bet. no.10:380-382 0 '58.
(Concrete) (Cement) (MIRA 11:11)

1ST AND 2ND DEGREE										3RD AND 4TH DEGREE									
PROCESSIES AND PROPERTIES INDEX																			
ca										20									
Comment for massive concrete. I. N. Kogan and G. M. Kuchuk. <i>Gipsudart. Vsesoyuz. Inst. Proektirovaniya Proektirovaniya Nauch.-Issledovatel. Rabote Tsentra. Proektirovaniya</i>, Trudy No. 3, 84-97(1943).—A review of methods of combating crack-formation in massive concrete structures, i. e., direct reduction of heat generation in concrete masses, reduction of temp. gradients between the concrete structures and the surroundings. G. M. Kuchukoff																			
ASB-11A METALLURGICAL LITERATURE CLASSIFICATION																			
1ST AND 2ND DEGREE										3RD AND 4TH DEGREE									
1ST AND 2ND DEGREE										3RD AND 4TH DEGREE									

RUSEK, V.

FRUITLAND, WYOMING, Vol. 10, No. 12, 1961
(No copyright)

- [illegible]

POLAND / Chemical Technology. Food Industry.

H-28

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 79360.

Author : Wierszyllowski, J., Rusek Z., Wituszynski, Z.,
Charlampowicz, Z., Walczak, H.

Inst : Not given.

Title : The Productivity and the Technological Value of
Ten Varieties of Rasberries at a Starting Period
of Fruit-Bearing on a Plantation.

Orig Pub: Roczn. nauk Rolniczych, 1957, A 77, No 1,
131-159.

Abstract: No abstract.

Card 1/1

80

Rushchuk, G. M.

✓ Evaluation of the freeze resistance of concrete by the change of the flexibility modulus. G. M. Rushchuk. *Trudy Vsesoyuz. Inst. po Proekt. i Nauch.-Issledovatel. Rabotam v Tsement. Prom.* 1954, No. 17, 70-88; *Referat. Zhur., Khim.* 1955, Abstr. No. 55835.—For evaluation of the freeze resistance of materials, the use of the modulus of flexural strength is recommended, since the disruption of the material's structure is related to it. The manner of flexural modulus detn. by the resonance frequency of flexure is explained. The theoretical basis of the method, the app. for detn. of the resonance frequency, the method of its detn., and the calcns. of the flexural modulus are given. N. V.

3

11

RUSHCHUK, G.M.

USSR/Chemical Technology. Chemical Products and their Application.
Glass. Ceramics. Construction Materials.

J-12

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27766.

Author : G.M. Rushchuk, N.P. Shteyert.

Inst : State ALL-UNION Institute of Projecting and Scientific Research
Work in Cement Industry.

Title : Methods of Fast Determination of Cement Brand.

Orig Pub: Tr. Gos. Vses. in-t po proektir. i nauch.-issled. rabotam v
tsement. prom-sti, 1956, vyp. 19, 84-114.

Abstract: The experimental data of checking five methods of fast determination of the brand of TsNIPS-1, TsNIPS-2, GNTs, YuzhNII cements and the autoclave method are enumerated. It seems to the authors that the method developed by Giprotsement together with NIITsement (The GNTs method) guarantees a more exact determination of the 28-day activity of cement than the YuzhNII and the autoclave methods. The fast methods of determination of the cement brand

Card : 1/2

-115-

USSR/Chemical Technology. Chemical Products and their Application. J-12
Glass. Ceramics. Construction Materials.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27766.

may produce satisfactory results only on condition that the conversion factors of the results of fast tests into the results of standard 28-hour tests are determined for cement of every brand and manufacturing method used in a factory. The statistical method of determination of the cement brand based on the results of 7-day tests and the mean intensity factor R_7/R_2 can be used efficiently by cement factories for the fast determination of the cement brand.

Card : 2/2

-116-

RUSCIOR, S.

5496:

Ruscior, Stefania. La correspondance par plans tangents complètement parallèles entre deux surfaces réglées, dans S_4 . Bul. Inst. Politehn. Iași (N.S.) 3 (1957), 25-28. (Russian and Romanian summaries)

Two planes in a four-dimensional space are called completely parallel [semi-parallel], if their intersection is a line [a point] in the hyperplane at infinity. A correspondence between two ruled surfaces S and S^* , which maps the rectilinear generators of S into those of S^* , is said to be a correspondence by completely parallel tangent planes if the tangent planes at corresponding points are completely parallel. The paper contains a necessary and sufficient condition for the existence of such a correspondence.

G. Soós (Debrecen)

621.349.077

3548

A Comparison of the Efficiencies of Rhombic Type Aerials.—**I. M. Rexhuk** (*Исход. Электроны. Техн.*, 1946, No. 4, pp. 13-18. In Russian.) Mathematical discussion showing that the gain of a variation of the broadside rhombic aerial, as proposed by Eisenberg, is 1.8 times higher on short waves and 1.51 times higher on long waves than in the case of an ordinary rhombic aerial.

RUSCHUK, V.I., inzh.

Installation and operation of a mercury-arc rectifier unit with
leading phase-shift angle. Prom.energ. 13 no.4:21-23 Ap '58.
(MIRA 11:4)

1.Dneprovskiy alyuminiyevyy zavod.
(Mercury-arc rectifiers)

RUSCHUKLIEV, Y.

T-2

BULGARIA / General Problems of Pathology. Immunity.

Abstr Jour : Ref. Zh.-Biol. No. 2, 1958, No 7575

Author : Vylchanov, V. Kh., Ruschukliev, Y.

Inst :

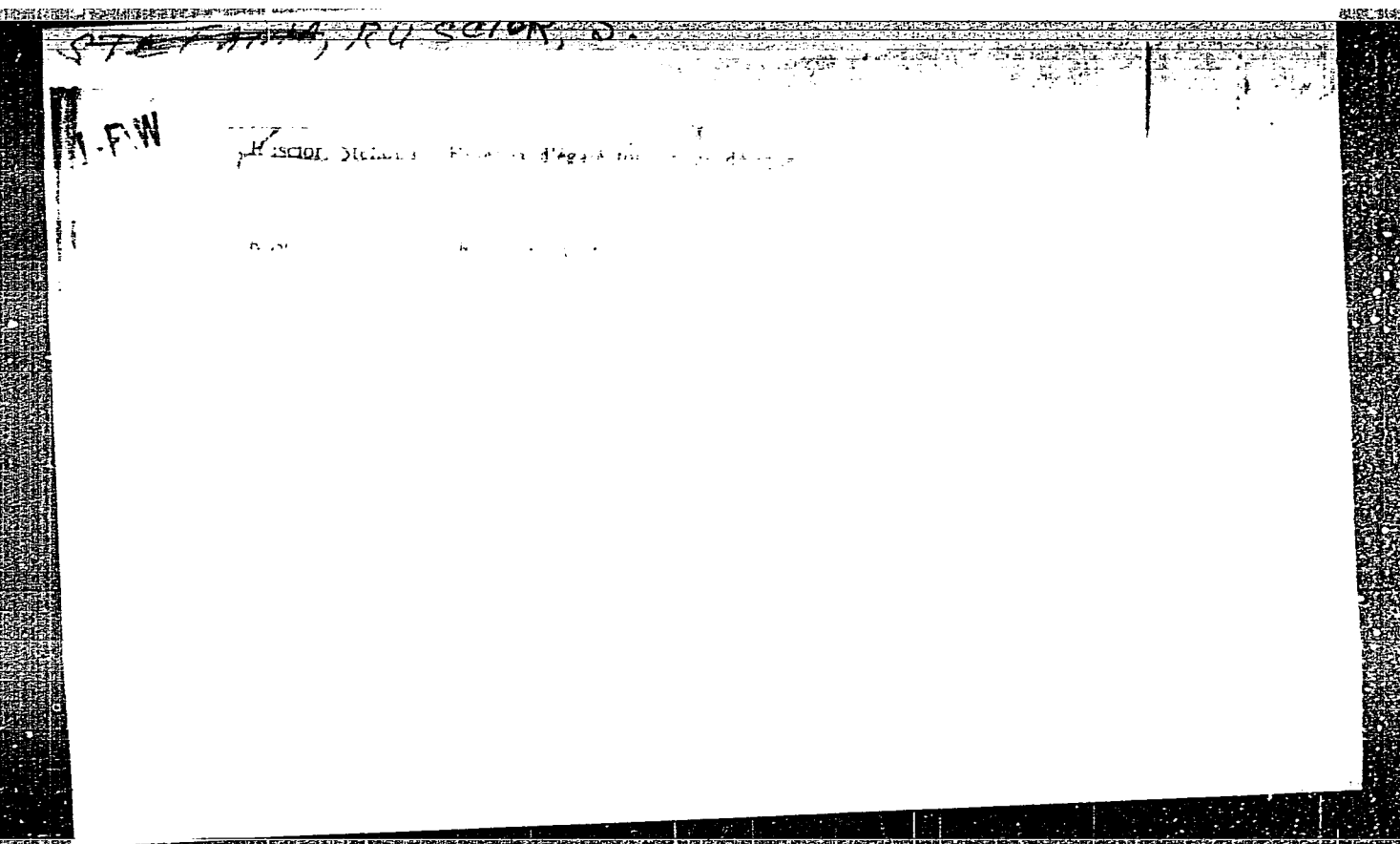
Title : The Influence of a Physical Load on the Non-Specific Phagocytic Reaction of the Blood.

Orig Pub : Isv. IN-TA, Biol. Blg, AN, 1956, 7, 209-229

Abstract : The intensive physical load on the ergometer bicycle for a period of 30-40 min. (30,000 - 40,000 kg/m) caused a diminution of phagocytosis (lasting 30 min. to several hours) to 48% of the initial level in 15 healthy subjects of 19 to 24 years of age. The depression of phagocytosis was more pronounced and more prolonged in untrained subjects. During the application of an intensive physical load "a myogenic"

Card : 1/2

4
The transfer of substance in the direct-current arc
Ruscio and Cornelia Cobanu (Inst. 4)
Bucarest, 1963, 12, 1 and 1964, 12, 1



RUSDEA, D.; ROSCA, D.; WITTENBERGER, C.

Behavior in salinity variations. XIV. Study on osmoregulation, and on the role of the nervous system in the osmoregulation phenomenon in Hirudo medicinalis. p. 113.

Academia Republicii Populare Romine. Filiala Cluj. STUDII SI CERCETARI DE BIOLOGIE. Cluj, Rumania. Vol. 9, no. 1, 1958.

Monthly List of East European Accessions (EEAI) Vol. 8, no. 7, July 1959.

Uncl.

PORA, Eugen A., acad.; RUSDEA, Delia; STOICOVICI, Florica

Biology of the horse mackerel in the Black Sea. Studii Biol
Cluj 14 no.1:107-112 '63.

1. Center of Biological Research, Rumanian Academy, Cluj Branch.

MARKOWSKI, Stanislaw, prof. dr inz.; RUSEK, Piotr, mgr inz.;
SKRZYPINSKI, Antoni, mgr inz.

Wearing analysis of the grinding wheel. Mechanik 37
no.4:202-205 '64.

1. School of Mining and Metallurgy, Krakow.

RACZKOWSKI, Jozef, dr. inz.; RUSEK, Piotr, mgr. inz.; SKRZYPINSKI,
Antoni, mgr. inz.

Possibilities of using high alloyed steels for cutting edges of
drill bits. Pt. 2. Rudy i metale 10 no.1:17-20 Ja '65.

RUSEK, Piotr, mgr inz.; SKRZYPINSKI, Antoni, mgr inz.; TWAROG, Jerzy, mgr inz.

Laboratory research on the usefulness of various materials for edges of drill bits. Nafta 21 no.1:8-13 '65.

1. School of Mining and Metallurgy, Karkow (for Rusek and Skrzypinski)
2. Geologic Agency, Krakow (for Twarog). Submitted February 1964.

RUSEK, V.; HANDLICEK, Z.

History of the Czechoslovakian Pharmaceutical Society. II.
Modern period (1919 - 1950). Cesk. farm. 13 no.4:210-218
My'64.

1. Ustav dejin lekarnictvi farmaceuticke fakulty UK [University Komenskeho], Bratislava; Farmaceuticke museum zavodniho klubu ROH lekarske sluzby hl. mesta Prahy.

ROMANIA

RUSESCU, Alfred, MD, Professor.

Bucharest, Sanatatea, No 12, Dec 63, p 6

"Prophylaxis Against Bronchitis in Children."

RUSSESU, A.D., prof.; IONESCU, V., dr.; STANCIU, R., dr.

Late appearance of mental disorders after recovery from tuberculous meningitis. *Pediatrics (Buch)* 14 no.2:125-132 Mar-Apr '65.

1. Lucrare efectuate in Spitalul Clinic de pediatrie "Emilia Ionescu", Bucuresti.

RUSFESCU, A., prof.; BOIU, N., dr.; IEREMIA-POBORAN, V., dr.

Some new clinical and genetic aspects of familial congenital epidermolysis bullosa in the newborn. *Pediatrics (Bucur)* 14 no.1:13-18 Ja-F'65.

1. Lucrare efectuata in Spitalul clinic de pediatrie "Emilia Irsa". Bucuresti.

RUSescu, C.

Distr: 4E2c(j) 15
Principles of synthetic rubber manufacturing. C.
Rusescu. Ind. usorari (Bucharest) 5, 211-16(1958).
Francois Kertesz
Review.

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RUSE, H. S.

Journal of Mathematical
Physics, 1953, Vol. 24,
No. 1, p. 11
Geometry.

Fig. 11. 1. Simple connection of a space with a symmetric connection. *UdSSR Math. Zh.* 2, No. 1, 1952, p. 11.

In a Riemannian space V_n with metric $ds^2 = g_{ij}dx^i dx^j$ ($i, j = 1, \dots, n$), let $P_0(x_0)$ be a fixed point and $s(x_0, x)$ be the geodesic arc length between two sufficiently near points $P_0(x_0)$ and $P(x)$. Then, if the function $\Omega = \frac{1}{2}s^2$ satisfies $\Delta_2 \Omega = f(\Omega)$, V_n is called centroharmonic with respect to P_0 and if this holds for all base points P_0 it is called completely harmonic. If the function f happens to be a constant, then the space is called simply centroharmonic or simply harmonic according as the solution $\Delta_2 \Omega = \text{const.}$ holds for one base point or for all base points.

In the paper under review, the author tries to give definitions of simply centroharmonic and harmonic affine spaces of symmetric connection. The author considers a system of paths with affine parameter t passing through a base point $P_0(x_0)$ and introduces a vector field by $P^i = dx^i/dt$. The space is simply centroharmonic with respect to P_0 if $Y^i_{;i} = n$ and simply harmonic if this solution holds for all base points. The condition for the space to be simply centroharmonic with respect to P_0 is ${}^* \Gamma^i_{jk} y^j = 0$ in a normal coordinate system y^i , from which we obtain an infinite sequence of relations.

(COVER)

In the last section, the author discusses the Riemannian extension V_{1n} :

$$ds^2 = (c_{ij} - 2\Gamma^a_{ij}\xi_a)dx^i dx^j + 2dx^i d\xi_i$$

of an affine space A_n of symmetric connection Γ^i_{jk} , where c_{ij} is a given symmetric covariant tensor in A_n . E. M. Patterson [J. London Math. Soc. 27, 102-107 (1952); these Rev. 13, 986] has shown that, if V_{1n} is simply harmonic, so is A_n and conversely. In this paper, the author obtains a formula for Ω in V_{1n} and uses it to prove a slightly stronger form of Patterson's theorem, namely that, if V_{1n} is harmonic, then it is simply harmonic and so is A_n ; with Patterson's converse that, if A_n is simply harmonic, so is V_{1n} . K. Yano.

RUSECKI, I. I.

On the methods of examination of the sick in the light of the teachings
of I. P. Pavlov. p.238. Soviet Science: Medicine 1952, No 3.

RUSEK, Iozef

Campodeidae (Diplura) of southeastern Europe. Zool. zhur. 44
no.9:1345-1357 '65. (MIRA 18:10)

1. Entomologicheskii institut, Praga.

RUSEK, MIROSLAV

CH ☒ Chromatographic semimicroanalysis. ~~CH~~ ~~RUSEK~~ ~~AT~~.
Direct determination of individual olefins in gases. Jaro-
slav Janák and Miroslav Rusek. Collection Czechoslov.
Chem. Commun., 28, 823-824 (1955) (in German). See
C.A. 49, 8047g. E. I. C.

Janak, J. (2)

the azotometer, the gases are passed through a normal chromatographic column as described previously. An app. for prep. gas samples by expelli; gases from solns., and a device for handling small amts. of gas, are given. Results of analysis of various mineral waters, naphtha water, scrubber water, and scrubber oil are given. M. Hudlický

2/2 7
④

RUSEK, Miroslav

(3)

Chromatographic semimicroanalysis of gases: VIII.
 Separation and analysis of some halogenated hydrocarbons.
 Jaroslav Janák and Miroslav Rusek (Ústav pro naftový
 výzkum, Brno, Czech.). Chem. Listy 48, 207-11 (1954);
 cf. C.A. 48, 3854c. The method of chromatographic an-
 alysis of gases has been applied to the analyses of halogenated
 hydrocarbons. R_f values of MeCl, MeBr, EtCl, CH₃-
 CHCl, and CF₃CFCl were measured at 20° and 85°:
 0.0039, 0.159; 0.0020, 0.120; —, 0.104; 0.0024, 0.110
 (at 60°), and 0.0099, 0.214. Analysis at 20° gives better
 results than at 85°. Absorption of the mixt. of CO₂ and
 halides in KOH results in partial hydrolysis of the halides
 increasing in the sequence CF₃CFCl < CH₃CHCl <
 MeCl < EtCl << MeBr. The hydrolysis causes decrease
 of the measured vol. and makes the measurements less ac-
 curate, and the detn. of MeBr impossible. M. Hudlický

✓ 8293 IIB T-4486
THE CHROMATOGRAPHIC SEMI-MICROANALYSIS OF
BASES IX THE DETERMINATION OF NITROUS OXIDE
IN THE INTEGRATED SEMI-MICROANALYSIS OF
THE CHROMATOGRAPHIC SEMI-MICROANALYSIS OF
BASES IX THE DETERMINATION OF NITROUS OXIDE
IN THE INTEGRATED SEMI-MICROANALYSIS OF

RUSEK, M.; JANAK, J.

"Chromatographic Semimicroanalysis of Gases. VIII. Separation and Analysis of Some Halogenated Hydrocarbons", P. 207, (CHEMICKE LISTY, Vol. 48, No. 2, Feb. 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

RUSEK, M

112. Chromatographic semimicro-analysis of gases. VIII. Separation and analysis of some halogenated hydrocarbons. J. Janák and M. Rusek (Chem. Listy, 1951, 48 (2), 207-211).—The chromatographic separation and analysis of mixtures of halogenated hydrocarbons is described. The following R_f values were obtained on silica gel with the passage of the eluting gas (CO_2) at the rate of 0.7 ml per sec.: CH_3Cl , 0.0039; CH_3Br , 0.0020; CH_3CHCl , 0.0024; CF_3CFCl , 0.0009 at 20°C ; CH_3Cl , 0.159; CH_3Br , 0.120; $\text{C}_2\text{H}_5\text{Cl}$, 0.104; CF_3CFCl , 0.214 at 85°C ; and CH_3CHCl , 0.110 at 65° to 70°C . In view of the considerable influence of temp. on the adsorption characteristics of this group of gases, better separation is achieved at 20° than at 85°C . Analytical applications of the method are limited owing to partial hydrolysis of the halides during their contact with the KOH in the azotometer, resulting in a decrease of the measured vol. The reactivity increases in the order $\text{CF}_3\text{CFCl} < \text{CH}_3\text{CHCl} < \text{CH}_3\text{Cl} < \text{C}_2\text{H}_5\text{Cl}$. The determination of CH_3Br is impossible. G. GLASER

PhOH and 1 cc. HCl, concg., and distg. H₂O and excess PhOH off under reduced pressure, crystd. from anhyd. AcOH, m. 210-17°. 2,6-Bis(3,5-hydroxymethyl-4-hydroxybenzyl)-p-cresol (II) was obtained by dissolving 1 g. I in 5.7 g. 20% NaOH and treating it at room temp. was neutralized with HCl to pH 7-7.5, then acidified with AcOH to pH 6-6.5. An oily product crystallized after a few days to give crystals from alc., C₁₈H₂₀O₆, m. 145°. 2,2'-Dihydroxy-5-methylidiphenylmethane (III) was obtained by dissolving 4 g. o-hydroxybenzyl alc. in 30 g. melted p-cresol and 2 ml. concd. HCl, boiling distg. excess p-cresol off with steam, and emulsifying remainder with H₂O. After a few days III crystallized from alc. and m. 99-101°. sol. in C₆H₆. 2,4'-Dihydroxy-5-methylidiphenylmethane (IV) was obtained by condensing p-hydroxybenzyl alc. with p-cresol. Crystn. begun from emulsion to give crystals from C₆H₆, m. 138-40°. 2,6-Bis[5-(4-hydroxybenzyl)-2-hydroxybenzyl]-p-cresol (V), obtained by dissolving 6 g. 4,4'-dihydroxydiphenylmethane in 60 ml. concd. AcOH. At 40°, 3 g. 2,6-dimethylol-p-cresol was added with stirring, heated, and treated with 2 ml. concd. HCl, then brought to boiling, and poured into 1 l. H₂O. The white ppt. is washed and dissolved in hot xylene. V is a white noncryst. substance, C₂₈H₃₀O₈, softening above 110°. 2,4,6-Tris(3-methyl-5-hydroxybenzyl)phenol (VI) was obtained by dissolving 2 g. Na 2,4,6-trimethylolphenate in 50 g. melted p-cresol. The mass is heated, then 10 ml. concd. HCl slowly added, heating continued (water bath) for 15-20 min., the pptd. NaCl filtered, and excess p-cresol distd. off with steam. C₂₁H₂₄O₆, crystals from C₆H₆, m. 182,5-4°. 3,3',5,5'-Tetrakis(2-hydroxy-5-methylbenzyl)-4,4'-dihydroxydiphenylmethane (VII) was obtained by dissolving 2.3 g. 3,3',5,5'-tetramethylol-4,4'-dihydroxydiphenylmethane in 20 g. melted p-cresol, adding at 35° 1 ml. concd. HCl (temp. rises to 60°), distg. excess p-cresol off with steam, and crystg. a few times from xylene in gellike form, then from toluene and benzene, m. 201-2°, sol. in Et₂O, MeOH, EtOH, and acetone.

L. M. Barakan

CZECH

304. Chromatographic semi-micro analysis of gases. IX. Determination of nitrous oxide. Janák and M. Kocok (Chem. Listy, 1964, 48 [3], 307-309). The chromatographic technique of gas analysis is suitable for the rapid estimation of N_2O in admixture with hydrogen, nitrogen, methane and ethane, in commercial N_2O and in natural gas. The R_f values of N_2O , measured in the usual way in an adsorption column 220 mm long and 5-1 mm in diameter with the eluting gas (CO_2) passing at the rate of 0.7 ml per sec., were as follows: on activated carbon, 0.0264 at 20° C and 0.234 at 80° C; and on silica gel, 0.0428 at 20° C and 0.297 at 80° C. Owing to the slight solubility of N_2O in conc. KOH, the nitrometer should be filled with a KOH soln. that has been exposed to an atmosphere containing N_2O . (C. GLASSER)

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RUSEK, M.

JOURNAL ARTICLE TRANSLATION

Transl. No.
& Country

TRANSLATION ISSUED BY TPA3/TID

Author

1486
Czechoslovakia

The Chromatographic Semi-Microanalysis
of Gases: 9.- The Determination of
Nitrous Oxide
Chem. Listy, Vol 48, pp 387-400, 1954

J. Janak
M. Rusek

Source: Index Aeronautique, Vol 11, No. 12, December, 1955, p 114

PUSEK, M. : JANAK, J.

"Chromatographic Seminicroanalysis of Gases. IX. Determination of Nitrous Oxide", P. 397, (CHEMICKÉ LISTY, Vol. 48, No. 3, Mar. 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4, No. 1, Jan. 1955, Uncl.

MUSEK, M.

The chromatographic semi-micro analysis of gases. XII. The separation and analysis of gaseous hydrocarbons. M. MUSEK and A. LAZAROV (Inst. Petrol. Res. Brno, Czechoslovakia). Coll Czech Chem Commun 35: 2016, 1192-1205. The separation of homologous cyclopropanes, e.g., cyclopropane and methoxycyclopropane, and cyclopropane and cyclobutane, on silica gel and charcoal at 20° C and 80° C is described. The sorption on silica gel increases with the increasing energy content, i.e., strain, for hydrocarbon molecules having the same number of carbon atoms and does not depend on the boiling point. The order of elution of mixtures of gases containing either 2 or 3 carbon atoms is, e.g., ethane, ethylene, acetylene and propane, cyclopropane, propylene, propyne. The quantitative analysis of a mixture of air, CO, ethane, ethylene, propylene and cyclobutane with an error of 0-4 per cent. and of anaesthetic mixtures of air, He, O, N₂O, ethylene and cyclopropane with an error of 1 per cent. is possible. P. S. STROSS

(2)

11-80

RUSEK, M. ; JANAK, J. ; LAZAREV, A.

Chromatographic semimicroanalysis of gases. XII. Separation and analysis of gaseous cyclorparaffins. p. 700

CHEMICKE LISTY (Ceskoslovenska akademie ved. Ceskoslovenska spolecnost chemicka) Praha, Czechoslovakia. Vol. 49, no. 5, May 1955

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 1, Jan 1960
Uncl.

RUSAK M

CZECH

11181* Chromatographic Semi-Microanalysis of Gases. Kromatograficki polumikroanaliza gazov. VIII. Analysis of Dissolved Gases. Analiz rastvorenykh gazov. IX. The Determination of Nitrous Oxide. Die Bestimmung von Stickoxydul. X. Determination of Small Quantities and Traces of Helium, Together With Neon, and of Hydrogen in Gases. Die Bestimmung kleiner Mengen bis Spuren von Helium mit Neon und von Wasserstoff in Gasen. (Russian and German.) J. Janik, I. Páralová, M. Rusek, and M. Tesářík. Collection of Czechoslovak Chemical Communications, v. 20, no. 2, Apr. 1955, p. 330-355.

Includes diagrams, tables, graphs. 41 ref.

~~MIROSLAV, RUSEK~~
RUSEK, M.

CZECH

✓ Chromatographic semimicroanalysis of gases. IX. De-
termination of nitrous oxides. Jaroslav Janák and Miroslav
Rusek. *Collection Czechoslov. Chem. Commun.* 20, 343-
348 (1955) (in German).—See C.A. 48, 7489c. X. Deter-
mination of minute and trace amounts of helium, neon,
and hydrogen in gases. Jaroslav Janák and Karel Tesářík.
Ibid. 248-55.—See C.A. 48, 13536d. E. J. C.

31

RUSEK, M.

CZECH

Chromatographic semimicroanalysis of gases. VII. Separation and analysis of gaseous cycloparaffins. Jaroslav Janák, Miroslav Rusek, and Anatolii Lazarev (Ústí nad Labem, Czech.). *Chem. Listy* 49, 700-6 (1955); cf. C.A. 49, 8047g. Chromatographic analysis was extended to gaseous cycloparaffins. Chromatographic spectra were measured for cyclopropane (I), methylcyclopropane (II), and cyclobutane (III). R_f values on activated C at 80° were 0.0857 for I, 0.0396 for II; on silica gel at 20° 0.0156 for I, 0.0041 for II; and on silica gel at 80° 0.257 for I, 0.193 for II, and 0.168 for III. Possibility of detg. the gaseous cycloparaffins in mixts. with other hydrocarbons is discussed. The method was used for the analysis of gaseous anesthetics and of the products of the photolysis of cyclopentanones wherein C_4H_8 and $MeCH:CH_2$ were found in addn. to the previously identified CO , C_2H_4 , and H_2 .
M. Hudlický

RUSEK, MIROSLAV

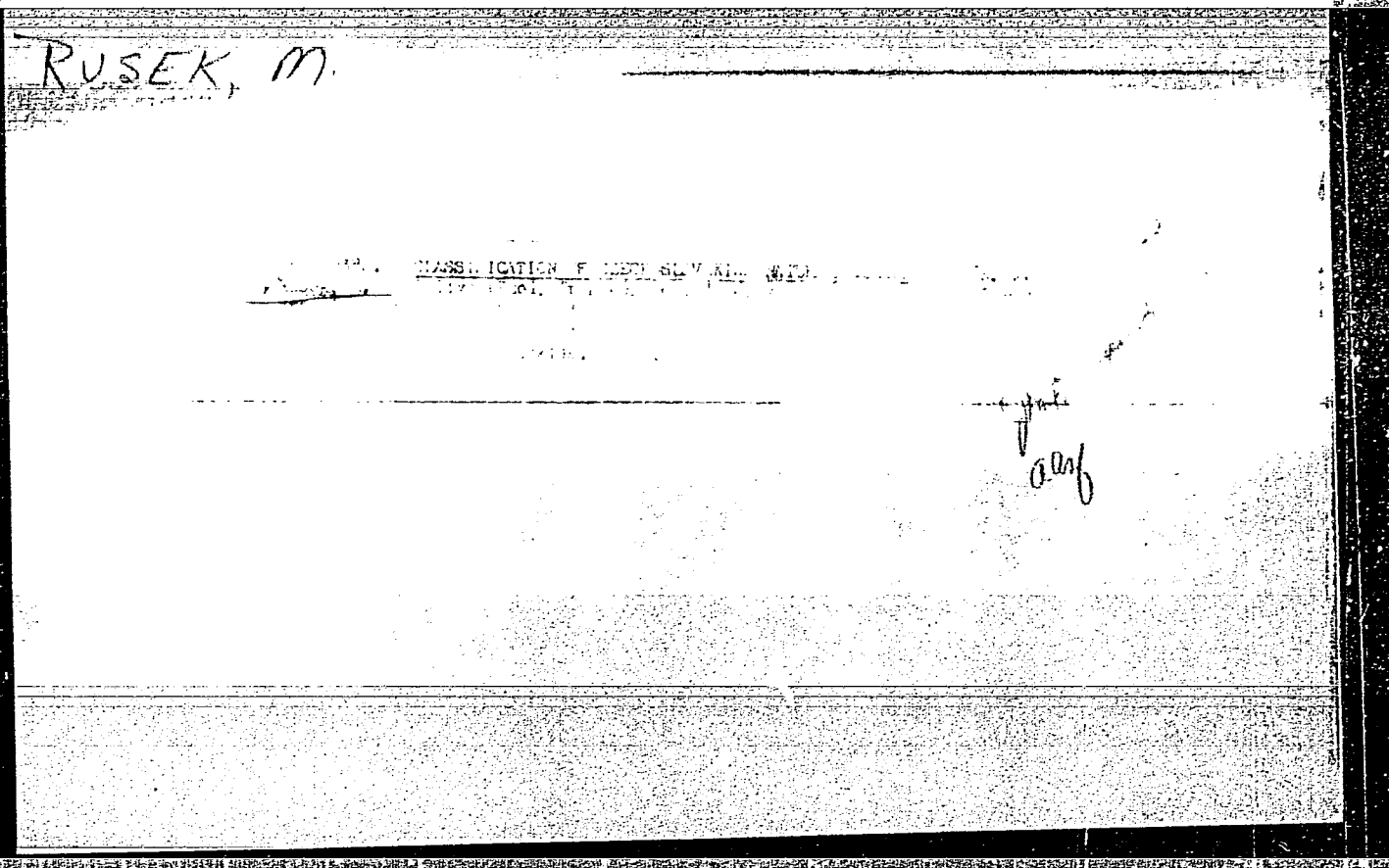
CZECH

Chromatographic semimicroanalysis of gases. XI. Direct determination of individual olefins in gases. Jaroslav Janak and Miroslav Rusek (Ústav pro naftový výzkum, Brno, Czech.). ~~Chem. Listy~~ 49, 191-2 (1955); cf. C.A. 48, 13536d. — A method for detg. traces of olefins in earth gases is based on absorption and couen. of olefins in 0.25M Hg(ClO₄)₂ in 2M HClO₄ in a special circulation app. C₂H₄ (I), C₃H₆ (II), and butylenes (III) were detd. down to the content 10⁻⁴ vol. %. With olefin couen. above 0.1%, the detn. in 10-200-ml. sample is possible with an accuracy within 10⁻² vol. %. Chromatographic spectra (R_f max.) of olefins on silicagel B are given: at 20°: I 0.0443, II 0.0058; at 60°: I 0.168, II 0.009, III 0.053; at 80°: I 0.351, II 0.174, III 0.138. XI. Hudlický

PH
02

RUSEK, M.

Field ✓ The classification of Czechoslovak natural gases. J. Janák and M. Rusek. *Paliva* 36, 327-9(1956).--The natural gases of Czechoslovakia are classified according to their chem. compn., their phys. characteristics, and their geographic source. H is found in amts. of less than 0.1 with the exception of one source where it rises up to 0.5%. N content is between 0.5 and 16.0, CO₂ less than 0.05, C₂H₄ from 50.0 to 99.0, C₂H₆ from 0.5 to 8.0, C₃H₈ and C₄H₁₀ less than 0.2 but in one class 2.0-5.0%. The heat values vary from 5000 to 8500 kcal./cu.m. T. Jurecic 3



Rusek, M.

Czechoslovakia /Chemical Technology. Chemical Products I-16
and Their Application

Treatment of natural gases and petroleum.
Motor fuels. Lubricants.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31942

Author : Janak J., Rusek M.

Title : Classification of Czechoslovak Natural Gases.

Orig Pub: Paliva, 1956, 36, No 10, 327-329

Abstract: Generalized data are presented concerning the
genesis, chemical composition and calorific value
of Czechoslovak natural gases, and on the basis
of these data a classification of these gases is
evolved, whereby they are subdivided into three
types according to chemical indices and into four
types according to genesis indices.

Card 1/1

Russek, M.

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E112/E453

5.5600 (1273, 1282 only)

AUTHORS: Novák, Josef, Rusek, Miroslav and Janák, Jaroslav

TITLE: Apparatus Using Flame-Ionization Detection

PERIODICAL: Chemické listy, 1960, Vol. 54, No. 11, pp. 1173-1182 + 1 plate

TEXT: Factors controlling the design of a Czechoslovak high-temperature gas chromatography apparatus using a flame ionization detector are discussed and operating data are given. A diagrammatic lay-out of the apparatus and of the electrical circuit in the detector are shown. A photograph of the complete and mass-produced instrument is included. Its design follows conventional lines: The apparatus is housed in a thermostat suitable for a temperature range up to 350°C and capable of employing four columns, each of them U-shaped and approximately 850 mm in length. Thermostatting is achieved by hot air which is made to circulate by means of a fan. ✓
The design of the flame ionization detector differs from that introduced originally to gas chromatography by I.G. McWilliam (Gas Chromatography, ed. D.H. Desty, Butterworth Scientific Publications, London, 1958, p. 142). In the McWilliam model the issuing gas is being burnt at a jet made from a hypodermic needle which, at the same time, serves as the positive pole for Card 1/5

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the flame conductance measurements. The negative pole consists of a piece of 30 mesh brass gauze about 1 cm above the needle. In the Czechoslovak design the jet is a steel capillary of 0.5 mm bore above which are placed two platinum wire electrodes on top of each other and perpendicular to the axis of the flame. In series with the electrodes is a battery of 120 to 200 V and a resistor, across which a recorder is connected. The following operating data were investigated: a) Time factor for the establishing and maintenance of constant temperature parameters. b) Maintenance of constant pressure conditions at varying flow-rates of carrier gases. After the introduction of mercury manostats, the deviations of pressure at flow-rate changes of 100% amounted to no more than 1.5%. c) Effect of voltage on signal sensitivity at constant weight of chromatographed compounds. Results are summarized in a table indicating voltages required for complete ionization at different flow rates and varying distances of electrodes. d) Effect of variations of N_2 and H_2 -flow on signal sensitivity and stability of base line. Sensitivity is more affected by change in N_2 -flow rate than that of H_2 .

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The effect of N_2 -flow, on the other hand, on the stability of the base line is negligible, while that of H_2 is considerable.

e) Effect of electrode distance and of their shape. Sensitivity decreases as the distance between the electrodes increases and a linear relationship is shown to exist. Position and shape of upper electrode is not of great importance, but detector can function properly only on condition that the lower electrode is placed within the ionized space. The optimum distance of the lower electrode from the tip of the jet is determined by the maximum concentrations of the eluted fractions passing through the detector. Flame profiles and temperature contours are studied in this connection. Ionization gradients leading to inversions of chromatograms and measures for their elimination are discussed. Inversions are more likely to occur at low flow-rates.

f) The performance of the instrument as a tool of analytical chemistry is discussed and results of analyses of different mixtures are given. A special study is devoted to partition chromatography homologues. It is considered that the concentration of ions per mole in a series of homologous

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hydrocarbons increases in proportion to the number of carbon atoms in the molecule. The conductivity of the flame is explained by the formation of carbon ions, which are considered a transitory stage before the combustion of the hydrocarbons⁷ to carbon dioxide. In compounds, therefore, in which the carbon atoms may already be in an oxidation stage, a transition to carbon ions is not possible and these compounds will show characteristics associated with compounds having a lower number of carbon atoms, e.g. acetone will behave like a compound containing only two carbon atoms. Compounds which do not contain carbon will show similar characteristics. The method has been found also very suitable for the analyses of biological mixtures and for medicinal work (acetone assay in diabetic urine etc). Other examples include results of analyses of coal tar constituents. Column packings, temperatures and other details are tabulated for each particular type of analyses. Illustrations that are included show the general arrangement of apparatus, a schematic diagram of the electrical circuit of the detector and a photograph of the complete instrument. There are

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